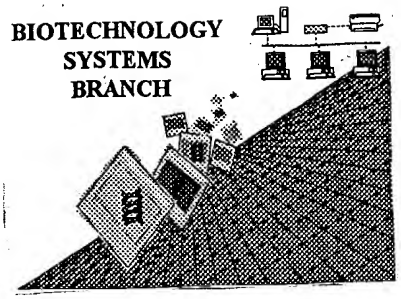
0510
1220

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/718,355
Source: OIPE
Date Processed by STIC: 12/17/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by the treatment given to all mail coming via the Brentwood Mail Facility.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:
1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**>, **EFS Submission User Manual** - ePAVE)
2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, 1911 South Clark Street, Crystal Mall One, Sequence Information, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, 2011 South Clark Place, Customer Window, Box Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Virginia 22202
4. Federal Express Delivery, 2011 South Clark Street, Crystal Plaza 2, Room 1B03-Mailroom, Box Sequence, Arlington, VA 22202

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/718,355

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFT

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4	Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7	Skipped Sequences (OLD RULES)	Sequence(s)_____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:43

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

pp 1-4, 9, 14-16

Does Not Comply
Corrected Diskette Needed

```
     3 <110> APPLICANT: McGill University
     4       Rouleau, Guy A.
     5       Lafreniere, Ronald G.
     6       Cossette, Patrick
     7       Ragsdale, David
     9 <120> TITLE OF INVENTION: LOCI FOR IDIOPATHIC GENERALIZED EPILEPSY, MUTATIONS
    10       THEREOF AND METHOD USING SAME TO ASSESS, DIAGNOSE,
    11       PROGNOSE OR OR TREAT EPILEPSY
    13 <130> FILE REFERENCE: GOUD:023
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/718,355
C--> 15 <141> CURRENT FILING DATE: 2001-12-17
    15 <150> PRIOR APPLICATION NUMBER: 09/167,623
    16 <151> PRIOR FILING DATE: 2000-11-24
W--> 18 <140> CURRENT APPLICATION NUMBER: PCT/CA00/01404
C--> 19 <141> CURRENT FILING DATE: 2000-11-24
W--> 21 <140> CURRENT APPLICATION NUMBER: <140? 60/167,623
C--> 22 <141> CURRENT FILING DATE: 1999-11-26
    24 <160> NUMBER OF SEQ ID NOS: 408
    26 <170> SOFTWARE: PatentIn Ver. 2.1
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do not use accent marks; they cause errors in processing

delete duplicate

see p. 15

ERRORED SEQUENCES

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   709 <210> SEQ ID NO: 4
   710 <211> LENGTH: 1246
   711 <212> TYPE: DNA
   712 <213> ORGANISM: Homo sapiens
   714 <400> SEQUENCE: 4
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E--> 716 tsaytnrkak vhssmmcttn cvmtmsndwt knvyttgyts kargcdtrdw nwdtvtavtv 120
E--> 717 ngnsartrvr aktsvgktvg asvkksdvmt vcsvagmgnr nkcwtnashs kntvnyngtn 180
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E--> 719 tymvvgsyna vvamaynata kamkkaaaat atashsrsaa grsdsssask ssksakrrnr 300
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E--> 721 ddhstdnsrr dsvrrhgrrn snstsrssrm avangkmhst vdcngvvsvg gsvtsvgvdk 420
E--> 722 atddngtttt mrkrrssshv smddsrrams astntvsrkc cwyksnwdcs ywkvkhvvnv 480
E--> 723 vmdvdatcvn tmamhymtdh nnvtvgnvtg tamkamdyyy gwndgvtsvg anvgsvrsrr 540
E--> 724 vkakswtnmk gnsvgagnty avavvgmgks ykdcvckasd crwhmndhsv rvcgwtmwdc 600
E--> 725 mvagamctvm mvmvgnvvna sssadnaatd ddnmnnavdr mhkgvayvkr kysrkkdkdd 660
E--> 726 nnkkdscmsn htagkddykd vngttsggtg ssvkydsdym snnstvtvav gsdnntdsss 720
E--> 727 dskknsssss gstvdgavvv tactgcvrkc cnvgrgkwwn rrtcrvhnwt vmssgaadyd 780
E--> 728 rktktmyadk vtymkwvayg ytytnawcwd vdvsvstana gysgaksrtr arrasrgmrv 840
E--> 729 vvnagasmnv vcwsmgvnag kyhcntttgd rddvnnhtdc krntarwknv kvndnvggys 900
E--> 730 vatkgwmdmy aavdsrnvky symyyvgstn gvdnnkkkgg dmtkkyynam kkgskkkrgn 960
E--> 731 kgmvdvtrvd smcnmvtmmv tddsyvttsr nvvtgcvksr hyytgwndvv vsvgmakyvs 1020
E--> 732 trvrargrrk gakgrtamms angvmyagms nayvkrvgdd mntgnsmctt sagwdgansk 1080
E--> 733 dcdnkvngss vkgdcgnsvg vsysvvvnmy avnsvatsas ddmyvwkdda tmksaaannk 1140
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see item 9 on Error Summary Sheet

same error throughout

see p. 2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

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Input Set : A:\ES.txt
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item 9

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1073 <210> SEQ ID NO: 23
1074 <211> LENGTH: 516
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1081 aaattcatag taataatcct tcttggcagg caacttatta ccaaaattaa ggactttact 180
1082 ttctatgtcc atctcactta cagaaactga atgaaagcag tagctcatca gaaggtagca 240
1083 ctgtggacat cggcgcacct gtagaagaac agcccgtagt ggaacctgaa gaaactcttg 300
1084 aacccgaagc ttgtttcact gaaggtaaag aaaagaatcc taatgttaat ctttcatttg 360
E--> 1085 gagtgcagct tatttagctg ttggtcagct aanataaatc acatataata aaatngcact 420
E--> 1086 ttgtaataga tataattcaa tcacctctaa tatnttgaca gacaaaaaaa cttaaagtct 480
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1185 gcaccagtga cgatttccag cactaaaatg tatggtaata ttttacaaaa tattcccctt 120
1186 tggtaggtgg aactccagcc taagtatgaa gaaagtctgt acatgtatct ttactttgtt 180
1187 attttcatca tctttgggtc cttcttcacc ttgaacctgt ttattggtgt catcatagat 240
1188 aatttcaacc agcagaaaaa gaagataagt atttctaata ttttctctcc cactgagata 300
1189 gaaaaattat tccttggagt gttttctctg ccaaatgagt acttgaattt agaacaaatg 360
1190 ggagtatata ttataactg 379
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2442 taagatatgt acttgtaaat taaccactag atttttaatg tgagcttggc tattgtctct 60
2443 caggtatacc tttacaggaa tttatacttt tgaatcactt attaaaatac ttgcaagggg 120
2444 cttttgttta gaagatttca catttttacg ggatccatgg aattggttgg atttcacagt 180
2445 cattactttt gcgtaagtat cttaatacat tttctatcct ggaagagtaa atcactggtg 240
E--> 2446 ggagcctata ctatattttc cttggtggct tgccttgaca gaccaagcat ttntcttagt 300
2447 aatcatagtt ttcttccaat caaattatcc agtttggaga aattaggaac tatcatagta 360
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2458 gccattttcc tcttaattgg gaaagctgat ggcgacactc atgaaattaa aaaggtcttg 120
E--> 2459 atgaaagacc aangaagacg tagatttccc taaattctga ataactctga tttaattcta 180
2460 caggtatgta acagaatttg taaacctagg caatgtttca gctcttcgaa ctttcagagt 240

RAW SEQUENCE LISTING
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Output Set: C:\CRF31113\REFHOLD\I718355.raw

2461 cttgagagct ttgaaaacta tttctgtaat tccaggtaag aagaaaatgg tataaggtgg 300
2462 taggcccctt atatctccaa ctgtttcttg tgttctgtca ttgtgtttgt gtgtgaaccc 360
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2489 tcacaaacat taaactaata ttgttggcat tctgcatgac atttttattt tccaggccaa 180
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2491 gattttgttt gtaggcctga agaccattgt gggggccctg atccagtcag tgaagaagct 300
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2493 gttgttcatg ggcaacctac gaaataaatg tttgcaatgg cctccagata attcttcctt 420
2494 tgaaataaat atcacttcct tctttaacaa ttcattggat gggaatggta ctactttcaa 480
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2497 ctcaatttag atgtgaatca agtgacttag actaatttaa gatgatttaa tacatataaa 660
2498 agagatatca aaggatacct tattctattt ttsttatctg tccattgata tagtaaaagt 720
2499 tctcatttga aaatgtgttg tcttatactc atgttgaaag taatttcata ttatgccata 780
2500 ttaaaaaagg tttatttggt agacattaat caggtttttc agtcatttta ataaataagt 840
2501 cagtagtttg aactattcmg cgtattccac tgaaatgtcg ttaagaagac tgaggggaaa 900
2502 taatttggcc ctatttggtt gatgcaacat atgtattgag tacatatgct atatctgaaa 960
2503 ctagagaaac catttatcaa gatgaaataa gaatttgtgt gctcctcaga aggttaagta 1020
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E--> 2565 tgaagctcaa ttaagcagta acatgataat tatttttaa gatnatatgc aacttcccac 180
2566 atactttgcg cccttctagg cggcagctgc agccgcatct gctgaatcaa gagacttcag 240
2567 tggtgctggt gggataggag ttttttcaga gagttcttca gtagcatcta agttgagctc 300
2568 caaaagtgaa aaagagctga aaaacagaag aaagaaaaag aaacagaaag aacagtctgg 360
2569 agaagaagag aaaaatgaca gagtcctaaa atcggaatct gaagacagca taagaagaaa 420
2570 aggtttccgt ttttccttgg aaggaagtag gctgacatat gaaaagagat tttcttctcc 480
2571 acaccaggta aaaatattaa attacatgaa ttgtgttctc ataaattttt taaaagaata 540
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2573 agtgatgatt atcaagtgtt ttggctatca cttcagagaa tttgtgagtt ttgcaacttt 660
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item 9

E--> 2706 aaaaaaaata ctatggtgtt gtatctaatn ttgtgacccc tgacctttac caaagcggat 120
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2708 gggcacacct aattaatttt tatatttaga ttaaagaaaa taattaaatg tgttttttg 240
2709 tgggattgat tttcagaagc taaatgcaac tagttcatct gaaggcagca cggttgatat 300
2710 tggagctccc gccgagggag aacagcctga ggttgaacct gaggaatccc ttgaacctga 360
E--> 2711 agcctgtttt acagaagnnn nnnnnnaagc aaaacaataa catatgtggt cttgagtatc 420
2712 ctcttttcta cccatttttt cctatttatt taaatgtctg tttatttgtc taccatctag 480
2713 ttcatctatc tatctgtatc tatctatcta tctatctatc tagtaatcat ctatacctat 540
2714 ccaacaactg tacatttatt tgtttttttt ttttgcattt gctgtttgaa aaaaaatgca 600
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item 9

item 9

3244 <210> SEQ ID NO: 67
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3246 <212> TYPE: PRT
3247 <213> ORGANISM: Homo sapiens
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3253 Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Lys Arg Ala Ala Glu Glu
3254 20 25 30
3256 Lys Ala Lys Lys Pro Lys Lys Glu Gln Asp Asn Asp Asp Glu Asn Lys
3257 35 40 45
3259 Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Asn Leu Pro Phe Ile
3260 50 55 60
3262 Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Glu Pro Leu Glu Asp Leu
3263 65 70 75 80
3265 Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Met Asn Lys Gly
3266 85 90 95
3268 Lys Ala Ile Ser Arg Phe Ser Ala Thr Ser Ala Leu Tyr Ile Leu Thr
3269 100 105 110
E--> 3271 Pro Leu Asn Pro Val Arg Lys Ile Ala Xaa Lys Ile Leu Val His Ser
3272 115 120 125
3274 Leu Phe Ser Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val Phe
3275 130 135 140
3277 Met Thr Leu Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr Thr
3278 145 150 155 160
3280 Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Leu Ala Arg
3281 165 170 175
3283 Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn Trp
3284 180 185 190
3286 Leu Asp Phe Ser Val Ile Val Met Ala Tyr Val Thr Glu Phe Val Asp
3287 195 200 205
3289 Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala Leu
3290 210 215 220
3292 Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala Leu
3293 225 230 235 240
3295 Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val Phe
3296 245 250 255
3298 Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly Asn
3299 260 265 270

RAW SEQUENCE LISTING
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Output Set: C:\CRF31113\REFHOLD\I718355.raw

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3305     290                 295                 300
3307 Phe Val Asn Val Thr Met Ser Thr Phe Asn Trp Lys Asp Tyr Ile Gly
3308 305                 310                 315                 320
3310 Asp Asp Ser His Phe Tyr Val Leu Asp Gly Gln Lys Asp Pro Leu Leu
3311                 325                 330                 335
3313 Cys Gly Asn Gly Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Ile Cys
3314             340                 345                 350
3316 Val Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp Thr
3317         355                 360                 365
3319 Phe Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp Tyr
3320     370                 375                 380
3322 Trp Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr
3323 385                 390                 395                 400
3325 Met Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Val
3326                 405                 410                 415
3328 Asn Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Gly Gln Asn Gln
3329             420                 425                 430
3331 Ala Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met
3332         435                 440                 445
3334 Leu Glu Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Val Ala Ala
3335     450                 455                 460
3337 Ala Ser Ala Ala Ser Arg Asp Phe Ser Gly Ile Gly Gly Leu Gly Glu
3338 465                 470                 475                 480
3340 Leu Leu Glu Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser Ala
3341                 485                 490                 495
3343 Lys Glu Trp Arg Asn Arg Arg Lys Lys Arg Arg Gln Arg Glu His Leu
3344             500                 505                 510
3346 Glu Gly Asn Asn Lys Gly Glu Arg Asp Ser Phe Pro Lys Ser Glu Ser
3347         515                 520                 525
3349 Glu Asp Ser Val Lys Arg Ser Ser Phe Leu Phe Ser Met Asp Gly Asn
3350     530                 535                 540
3352 Arg Leu Thr Ser Asp Lys Lys Phe Cys Ser Pro His Gln Ser Leu Leu
3353 545                 550                 555                 560
3355 Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Lys Thr Ser
3356                 565                 570                 575
3358 Ile Phe Ser Phe Arg Gly Arg Ala Lys Asp Val Gly Ser Glu Asn Asp
3359             580                 585                 590
3361 Phe Ala Asp Asp Glu His Ser Thr Phe Glu Asp Ser Glu Ser Arg Arg
3362         595                 600                 605
3364 Asp Ser Leu Phe Val Pro His Arg His Gly Glu Arg Arg Asn Ser Asn
3365     610                 615                 620
3367 Gly Thr Thr Thr Glu Thr Glu Val Arg Lys Arg Arg Leu Ser Ser Tyr
3368 625                 630                 635                 640
3370 Gln Ile Ser Met Glu Met Leu Glu Asp Ser Ser Gly Arg Gln Arg Ala
3371                 645                 650                 655
3373 Val Ser Ile Ala Ser Ile Leu Thr Asn Thr Met Glu Glu Leu Glu Glu
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

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3377          675                 680                 685
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3380      690                 695                 700
3382 Asn Leu Ile Val Met Asp Pro Phe Val Asp Leu Ala Ile Thr Ile Cys
3383 705                 710                 715                 720
3385 Ile Val Leu Asn Thr Leu Phe Met Ala Met Glu His Tyr Pro Met Thr
3386                 725                 730                 735
3388 Glu Gln Phe Ser Ser Val Leu Thr Val Gly Asn Leu Val Phe Thr Gly
3389             740                 745                 750
3391 Ile Phe Thr Ala Glu Met Val Leu Lys Ile Ile Ala Met Asp Pro Tyr
3392          755                 760                 765
3394 Tyr Tyr Phe Gln Glu Gly Trp Asn Ile Phe Asp Gly Ile Ile Val Ser
3395      770                 775                 780
3397 Leu Ser Leu Met Glu Leu Gly Leu Ser Asn Val Glu Gly Leu Ser Val
3398 785                 790                 795                 800
3400 Leu Arg Ser Phe Arg Leu Leu Arg Val Phe Lys Leu Ala Lys Ser Trp
3401                 805                 810                 815
3403 Pro Thr Leu Asn Met Leu Ile Lys Ile Ile Gly Asn Ser Val Gly Ala
3404             820                 825                 830
3406 Leu Gly Asn Leu Thr Leu Val Leu Ala Ile Ile Val Phe Ile Phe Ala
3407          835                 840                 845
3409 Val Val Gly Met Gln Leu Phe Gly Lys Ser Tyr Lys Glu Cys Val Cys
3410      850                 855                 860
3412 Lys Ile Asn Asp Asp Cys Thr Leu Pro Arg Trp His Met Asn Asp Phe
3413 865                 870                 875                 880
3415 Phe His Ser Phe Leu Ile Val Phe Arg Val Leu Cys Gly Glu Trp Ile
3416                 885                 890                 895
3418 Glu Thr Met Trp Asp Cys Met Glu Val Ala Gly Gln Thr Met Cys Leu
3419             900                 905                 910
3421 Ile Val Phe Met Leu Val Met Val Ile Gly Asn Leu Val Val Leu Asn
3422          915                 920                 925
3424 Leu Phe Leu Ala Leu Leu Leu Ser Ser Phe Ser Ser Asp Asn Leu Ala
3425      930                 935                 940
3427 Ala Thr Asp Asp Asp Asn Glu Met Asn Asn Leu Gln Ile Ala Val Gly
3428 945                 950                 955                 960
3430 Arg Met Gln Lys Gly Ile Asp Tyr Val Lys Asn Lys Met Arg Glu Cys
3431                 965                 970                 975
3433 Phe Gln Lys Ala Phe Phe Arg Lys Pro Lys Val Ile Glu Ile His Glu
3434             980                 985                 990
3436 Gly Asn Lys Ile Asp Ser Cys Met Ser Asn Asn Thr Gly Ile Glu Ile
3437          995                1000                1005
3439 Ser Lys Glu Leu Asn Tyr Leu Arg Asp Gly Asn Gly Thr Thr Ser Gly
3440     1010                1015                1020
3442 Val Gly Thr Gly Ser Ser Val Glu Lys Tyr Val Ile Asp Glu Asn Asp
3443 1025                1030                1035                1040
3445 Tyr Met Ser Phe Ile Asn Asn Pro Ser Leu Thr Val Thr Val Pro Ile
3446                1045                1050                1055
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:43

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3448 Ala Val Gly Glu Ser Asp Phe Glu Asn Leu Asn Thr Glu Glu Phe Ser
3449            1060                1065                1070
3451 Ser Glu Ser Glu Leu Glu Glu Ser Lys Glu Lys Leu Asn Ala Thr Ser
3452        1075                1080                1085
3454 Ser Ser Glu Gly Ser Thr Val Asp Val Val Leu Pro Arg Glu Gly Glu
3455    1090                1095                1100
3457 Gln Ala Glu Thr Glu Pro Glu Glu Asp Leu Lys Pro Glu Ala Cys Phe
3458 1105                1110                1115                1120
3460 Thr Glu Gly Cys Ile Lys Lys Phe Pro Phe Cys Gln Val Ser Thr Glu
3461                1125                1130                1135
3463 Glu Gly Lys Gly Lys Ile Trp Trp Asn Leu Arg Lys Thr Cys Tyr Ser
3464            1140                1145                1150
3466 Ile Val Glu His Asn Trp Phe Glu Thr Phe Ile Val Phe Met Ile Leu
3467        1155                1160                1165
3469 Leu Ser Ser Gly Ala Leu Ala Phe Glu Asp Ile Tyr Ile Glu Gln Arg
3470    1170                1175                1180
3472 Lys Thr Ile Lys Thr Met Leu Glu Tyr Ala Asp Lys Val Phe Thr Tyr
3473 1185                1190                1195                1200
3475 Ile Phe Ile Leu Glu Met Leu Leu Lys Trp Val Ala Tyr Gly Phe Gln
3476                1205                1210                1215
3478 Thr Tyr Phe Thr Asn Ala Trp Cys Trp Leu Asp Phe Leu Ile Val Asp
3479            1220                1225                1230
3481 Val Ser Leu Val Ser Leu Val Ala Asn Ala Leu Gly Tyr Ser Glu Leu
3482        1235                1240                1245
3484 Gly Ala Ile Lys Ser Leu Arg Thr Leu Arg Ala Leu Arg Pro Leu Arg
3485    1250                1255                1260
3487 Ala Leu Ser Arg Phe Glu Gly Met Arg Val Val Val Asn Ala Leu Val
3488 1265                1270                1275                1280
3490 Gly Ala Ile Pro Ser Ile Met Asn Val Leu Leu Val Cys Leu Ile Phe
3491                1285                1290                1295
3493 Trp Leu Ile Phe Ser Ile Met Gly Val Asn Leu Phe Ala Gly Lys Phe
3494            1300                1305                1310
3496 Tyr His Cys Val Asn Met Thr Thr Gly Asn Met Phe Asp Ile Ser Asp
3497        1315                1320                1325
3499 Val Asn Asn Leu Ser Asp Cys Gln Ala Leu Gly Lys Gln Ala Arg Trp
3500    1330                1335                1340
3502 Lys Asn Val Lys Val Asn Phe Asp Asn Val Gly Ala Gly Tyr Leu Ala
3503 1345                1350                1355                1360
3505 Leu Leu Gln Val Ala Thr Phe Lys Gly Trp Met Asp Ile Met Tyr Ala
3506                1365                1370                1375
3508 Ala Val Asp Ser Arg Asp Val Lys Leu Gln Pro Val Tyr Glu Glu Asn
3509            1380                1385                1390
3511 Leu Tyr Met Tyr Leu Tyr Phe Val Ile Phe Ile Ile Phe Gly Ser Phe
3512        1395                1400                1405
3514 Phe Thr Leu Asn Leu Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln
3515    1410                1415                1420
3517 Gln Lys Lys Lys Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu Gln
3518 1425                1430                1435                1440
3520 Lys Lys Tyr Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys Pro Gln
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:43

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3521                1445                1450                1455
3523 Lys Pro Ile Pro Arg Pro Ala Asn Lys Phe Gln Gly Met Val Phe Asp
3524            1460                1465                1470
3526 Phe Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met Ile Leu Ile Cys
3527        1475                1480                1485
3529 Leu Asn Met Val Thr Met Met Val Glu Thr Asp Asp Gln Gly Lys Tyr
3530    1490                1495                1500
3532 Met Thr Leu Val Leu Ser Arg Ile Asn Leu Val Phe Ile Val Leu Phe
3533 1505                1510                1515                1520
3535 Thr Gly Glu Phe Val Leu Lys Leu Val Ser Leu Arg His Tyr Tyr Phe
3536                1525                1530                1535
3538 Thr Ile Gly Trp Asn Ile Phe Asp Phe Val Val Val Ile Leu Ser Ile
3539            1540                1545                1550
3541 Val Gly Met Phe Leu Ala Glu Met Ile Glu Lys Tyr Phe Val Ser Pro
3542        1555                1560                1565
3544 Thr Leu Phe Arg Val Ile Arg Leu Ala Arg Ile Gly Arg Ile Leu Arg
3545    1570                1575                1580
3547 Leu Ile Lys Gly Ala Lys Gly Ile Arg Thr Leu Leu Phe Ala Leu Met
3548 1585                1590                1595                1600
3550 Met Ser Leu Pro Ala Leu Phe Asn Ile Gly Leu Leu Leu Phe Leu Val
3551                1605                1610                1615
3553 Met Phe Ile Tyr Ala Ile Phe Gly Met Ser Asn Phe Ala Tyr Val Lys
3554            1620                1625                1630
3556 Lys Glu Ala Gly Ile Asp Asp Met Phe Asn Phe Glu Thr Phe Gly Asn
3557        1635                1640                1645
3559 Ser Met Ile Cys Leu Phe Gln Ile Thr Thr Ser Ala Gly Trp Asp Gly
3560    1650                1655                1660
3562 Leu Leu Ala Pro Ile Leu Asn Ser Ala Pro Pro Asp Cys Asp Pro Asp
3563 1665                1670                1675                1680
3565 Thr Ile His Pro Gly Ser Ser Val Lys Gly Asp Cys Gly Asn Pro Ser
3566                1685                1690                1695
3568 Val Gly Ile Phe Phe Phe Val Ser Tyr Ile Ile Ile Ser Phe Leu Val
3569            1700                1705                1710
3571 Val Val Asn Ser Tyr Ile Ala Val Ile Leu Glu Asn Phe Ser Val Ala
3572        1715                1720                1725
3574 Thr Glu Glu Ser Ala Glu Pro Leu Ser Glu Asp Asp Phe Glu Met Phe
3575    1730                1735                1740
3577 Tyr Glu Val Trp Glu Lys Phe Asp Pro Asp Ala Thr Gln Phe Ile Glu
3578 1745                1750                1755                1760
3580 Phe Ser Lys Leu Ser Asp Phe Ala Ala Ala Leu Asp Pro Pro Leu Leu
3581                1765                1770                1775
3583 Ile Ala Lys Pro Asn Lys Val Gln Leu Ile Ala Met Asp Leu Pro Met
3584            1780                1785                1790
3586 Val Ser Gly Asp Arg Ile His Cys Leu Asp Ile Leu Phe Ala Phe Thr
3587        1795                1800                1805
3589 Lys Arg Val Leu Gly Glu Ser Gly Glu Met Asp Ala Leu Arg Ile Gln
3590    1810                1815                1820
3592 Met Glu Asp Arg Phe Met Ala Ser Asn Pro Ser Lys Val Ser Tyr Glu
3593 1825                1830                1835                1840
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:43

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3595 Pro Ile Thr Thr Thr Leu Lys Arg Lys Gln Glu Glu Val Ser Ala Ala
3596                1845                1850                1855
3598 Ile Ile Gln Arg Asn Phe Arg Cys Tyr Leu Leu Lys Gln Arg Leu Lys
3599            1860                1865                1870
3601 Asn Ile Ser Ser Asn Tyr Asn Lys Glu Ala Ile Lys Gly Arg Ile Asp
3602        1875                1880                1885
3604 Leu Pro Ile Lys Gln Asp Met Ile Ile Asp Lys Leu Asn Gly Asn Ser
3605    1890                1895                1900
3607 Thr Pro Glu Lys Thr Asp Gly Ser Ser Ser Thr Thr Ser Pro Pro Ser
3608 1905                1910                1915                1920
3610 Tyr Asp Ser Val Thr Lys Pro Asp Lys Glu Lys Phe Glu Lys Asp Lys
3611                1925                1930                1935
3613 Pro Glu Lys Glu Ser Lys Gly Lys Glu Val Arg Glu Asn Gln Lys
3614            1940                1945                1950
3617 <210> SEQ ID NO: 68
3618 <211> LENGTH: 1951
3619 <212> TYPE: PRT
3620 <213> ORGANISM: Homo sapiens
3622 <400> SEQUENCE: 68
3623 Met Ala Gln Ala Leu Leu Val Pro Pro Gly Pro Glu Ser Phe Arg Leu
3624   1               5                  10                  15
3626 Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Lys Arg Ala Ala Glu Glu
3627             20                  25                  30
3629 Lys Ala Lys Lys Pro Lys Lys Glu Gln Asp Asn Asp Asp Glu Asn Lys
3630         35                  40                  45
3632 Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Asn Leu Pro Phe Ile
3633     50                  55                  60
3635 Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Glu Pro Leu Glu Asp Leu
3636 65                  70                  75                  80
3638 Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe Ile Val Met Asn Lys Gly
3639                 85                  90                  95
3641 Lys Ala Ile Ser Arg Phe Ser Ala Thr Ser Ala Leu Tyr Ile Leu Thr
3642             100                 105                 110
E--> 3644 Pro Leu Asn Pro Val Arg Lys Ile Ala Xaa Lys Ile Leu Val His Ser
3645         115                 120                 125
3647 Leu Phe Ser Met Leu Ile Met Cys Thr Ile Leu Thr Asn Cys Val Phe
3648     130                 135                 140
3650 Met Thr Leu Ser Asn Pro Pro Asp Trp Thr Lys Asn Val Glu Tyr Thr
3651 145                 150                 155                 160
3653 Phe Thr Gly Ile Tyr Thr Phe Glu Ser Leu Ile Lys Ile Leu Ala Arg
3654                 165                 170                 175
3656 Gly Phe Cys Leu Glu Asp Phe Thr Phe Leu Arg Asp Pro Trp Asn Trp
3657             180                 185                 190
3659 Leu Asp Phe Ser Val Ile Val Met Ala Tyr Val Thr Glu Phe Val Ser
3660         195                 200                 205
3662 Leu Gly Asn Val Ser Ala Leu Arg Thr Phe Arg Val Leu Arg Ala Leu
3663     210                 215                 220
3665 Lys Thr Ile Ser Val Ile Pro Gly Leu Lys Thr Ile Val Gly Ala Leu
3666 225                 230                 235                 240
```

Item 9

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:43

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3668 Ile Gln Ser Val Lys Lys Leu Ser Asp Val Met Ile Leu Thr Val Phe
3669                 245                 250                 255
3671 Cys Leu Ser Val Phe Ala Leu Ile Gly Leu Gln Leu Phe Met Gly Asn
3672             260                 265                 270
3674 Leu Arg Asn Lys Cys Leu Gln Trp Pro Pro Ser Asp Ser Ala Phe Glu
3675         275                 280                 285
3677 Thr Asn Thr Thr Ser Tyr Phe Asn Gly Thr Met Asp Ser Asn Gly Thr
3678     290                 295                 300
3680 Phe Val Asn Val Thr Met Ser Thr Phe Asn Trp Lys Asp Tyr Ile Gly
3681 305                 310                 315                 320
3683 Asp Asp Ser His Phe Tyr Val Leu Asp Gly Gln Lys Asp Pro Leu Leu
3684                 325                 330                 335
3686 Cys Gly Asn Gly Ser Asp Ala Gly Gln Cys Pro Glu Gly Tyr Ile Cys
3687             340                 345                 350
3689 Val Lys Ala Gly Arg Asn Pro Asn Tyr Gly Tyr Thr Ser Phe Asp Thr
3690         355                 360                 365
3692 Phe Ser Trp Ala Phe Leu Ser Leu Phe Arg Leu Met Thr Gln Asp Tyr
3693     370                 375                 380
3695 Trp Glu Asn Leu Tyr Gln Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr
3696 385                 390                 395                 400
3698 Met Ile Phe Phe Val Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Val
3699                 405                 410                 415
3701 Asn Leu Ile Leu Ala Val Val Ala Met Ala Tyr Glu Gly Gln Asn Gln
3702             420                 425                 430
3704 Ala Thr Leu Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met
3705         435                 440                 445
3707 Leu Glu Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Val Ala Ala
3708     450                 455                 460
3710 Ala Ser Ala Ala Ser Arg Asp Phe Ser Gly Ile Gly Gly Leu Gly Glu
3711 465                 470                 475                 480
3713 Leu Leu Glu Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser Ala
3714                 485                 490                 495
3716 Lys Glu Trp Arg Asn Arg Arg Lys Lys Arg Arg Gln Arg Glu His Leu
3717             500                 505                 510
3719 Glu Gly Asn Asn Lys Gly Glu Arg Asp Ser Phe Pro Lys Ser Glu Ser
3720         515                 520                 525
3722 Glu Asp Ser Val Lys Arg Ser Ser Phe Leu Phe Ser Met Asp Gly Asn
3723     530                 535                 540
3725 Arg Leu Thr Ser Asp Lys Lys Phe Cys Ser Pro His Gln Ser Leu Leu
3726 545                 550                 555                 560
3728 Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg Arg Asn Ser Lys Thr Ser
3729                 565                 570                 575
3731 Ile Phe Ser Phe Arg Gly Arg Ala Lys Asp Val Gly Ser Glu Asn Asp
3732             580                 585                 590
3734 Phe Ala Asp Asp Glu His Ser Thr Phe Glu Asp Ser Glu Ser Arg Arg
3735         595                 600                 605
3737 Asp Ser Leu Phe Val Pro His Arg His Gly Glu Arg Arg Asn Ser Asn
3738     610                 615                 620
3740 Gly Thr Thr Thr Glu Thr Glu Val Arg Lys Arg Arg Leu Ser Ser Tyr
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
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Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3741 625                 630                 635                 640
3743 Gln Ile Ser Met Glu Met Leu Glu Asp Ser Ser Gly Arg Gln Arg Ala
3744                 645                 650                 655
3746 Val Ser Ile Ala Ser Ile Leu Thr Asn Thr Met Glu Glu Leu Glu Glu
3747             660                 665                 670
3749 Ser Arg Gln Lys Cys Pro Pro Cys Trp Tyr Arg Phe Ala Asn Val Phe
3750         675                 680                 685
3752 Leu Ile Trp Asp Cys Cys Asp Ala Trp Leu Lys Val Lys His Leu Val
3753     690                 695                 700
3755 Asn Leu Ile Val Met Asp Pro Phe Val Asp Leu Ala Ile Thr Ile Cys
3756 705                 710                 715                 720
3758 Ile Val Leu Asn Thr Leu Phe Met Ala Met Glu His Tyr Pro Met Thr
3759                 725                 730                 735
3761 Glu Gln Phe Ser Ser Val Leu Thr Val Gly Asn Leu Val Phe Thr Gly
3762             740                 745                 750
3764 Ile Phe Thr Ala Glu Met Val Leu Lys Ile Ile Ala Met Asp Pro Tyr
3765         755                 760                 765
3767 Tyr Tyr Phe Gln Glu Gly Trp Asn Ile Phe Asp Gly Ile Ile Val Ser
3768     770                 775                 780
3770 Leu Ser Leu Met Glu Leu Gly Leu Ser Asn Val Glu Gly Leu Ser Val
3771 785                 790                 795                 800
3773 Leu Arg Ser Phe Arg Leu Leu Arg Val Phe Lys Leu Ala Lys Ser Trp
3774                 805                 810                 815
3776 Pro Thr Leu Asn Met Leu Ile Lys Ile Ile Gly Asn Ser Val Gly Ala
3777             820                 825                 830
3779 Leu Gly Asn Leu Thr Leu Val Leu Ala Ile Ile Val Phe Ile Phe Ala
3780         835                 840                 845
3782 Val Val Gly Met Gln Leu Phe Gly Lys Ser Tyr Lys Glu Cys Val Cys
3783     850                 855                 860
3785 Lys Ile Asn Asp Asp Cys Thr Leu Pro Arg Trp His Met Asn Asp Phe
3786 865                 870                 875                 880
3788 Phe His Ser Phe Leu Ile Val Phe Arg Val Leu Cys Gly Glu Trp Ile
3789                 885                 890                 895
3791 Glu Thr Met Trp Asp Cys Met Glu Val Ala Gly Gln Thr Met Cys Leu
3792             900                 905                 910
3794 Ile Val Phe Met Leu Val Met Val Ile Gly Asn Leu Val Val Leu Asn
3795         915                 920                 925
3797 Leu Phe Leu Ala Leu Leu Leu Ser Ser Phe Ser Ser Asp Asn Leu Ala
3798     930                 935                 940
3800 Ala Thr Asp Asp Asp Asn Glu Met Asn Asn Leu Gln Ile Ala Val Gly
3801 945                 950                 955                 960
3803 Arg Met Gln Lys Gly Ile Asp Tyr Val Lys Asn Lys Met Arg Glu Cys
3804                 965                 970                 975
3806 Phe Gln Lys Ala Phe Phe Arg Lys Pro Lys Val Ile Glu Ile His Glu
3807             980                 985                 990
3809 Gly Asn Lys Ile Asp Ser Cys Met Ser Asn Asn Thr Gly Ile Glu Ile
3810         995                1000                1005
3812 Ser Lys Glu Leu Asn Tyr Leu Arg Asp Gly Asn Gly Thr Thr Ser Gly
3813    1010                1015                1020
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
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Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3815 Val Gly Thr Gly Ser Ser Val Glu Lys Tyr Val Ile Asp Glu Asn Asp
3816 1025                1030                1035                1040
3818 Tyr Met Ser Phe Ile Asn Asn Pro Ser Leu Thr Val Thr Val Pro Ile
3819                1045                1050                1055
3821 Ala Val Gly Glu Ser Asp Phe Glu Asn Leu Asn Thr Glu Glu Phe Ser
3822            1060                1065                1070
3824 Ser Glu Ser Glu Leu Glu Glu Ser Lys Glu Lys Leu Asn Ala Thr Ser
3825        1075                1080                1085
3827 Ser Ser Glu Gly Ser Thr Val Asp Val Val Leu Pro Arg Glu Gly Glu
3828    1090                1095                1100
3830 Gln Ala Glu Thr Glu Pro Glu Glu Asp Leu Lys Pro Glu Ala Cys Phe
3831 1105                1110                1115                1120
3833 Thr Glu Gly Cys Ile Lys Lys Phe Pro Phe Cys Gln Val Ser Thr Glu
3834                1125                1130                1135
3836 Glu Gly Lys Gly Lys Ile Trp Trp Asn Leu Arg Lys Thr Cys Tyr Ser
3837            1140                1145                1150
3839 Ile Val Glu His Asn Trp Phe Glu Thr Phe Ile Val Phe Met Ile Leu
3840        1155                1160                1165
3842 Leu Ser Ser Gly Ala Leu Ala Phe Glu Asp Ile Tyr Ile Glu Gln Arg
3843    1170                1175                1180
3845 Lys Thr Ile Lys Thr Met Leu Glu Tyr Ala Asp Lys Val Phe Thr Tyr
3846 1185                1190                1195                1200
3848 Ile Phe Ile Leu Glu Met Leu Leu Lys Trp Val Ala Tyr Gly Phe Gln
3849                1205                1210                1215
3851 Thr Tyr Phe Thr Asn Ala Trp Cys Trp Leu Asp Phe Leu Ile Val Asp
3852            1220                1225                1230
3854 Val Ser Leu Val Ser Leu Val Ala Asn Ala Leu Gly Tyr Ser Glu Leu
3855        1235                1240                1245
3857 Gly Ala Ile Lys Ser Leu Arg Thr Leu Arg Ala Leu Arg Pro Leu Arg
3858    1250                1255                1260
3860 Ala Leu Ser Arg Phe Glu Gly Met Arg Val Val Val Asn Ala Leu Val
3861 1265                1270                1275                1280
3863 Gly Ala Ile Pro Ser Ile Met Asn Val Leu Leu Val Cys Leu Ile Phe
3864                1285                1290                1295
3866 Trp Leu Ile Phe Ser Ile Met Gly Val Asn Leu Phe Ala Gly Lys Phe
3867            1300                1305                1310
3869 Tyr His Cys Val Asn Met Thr Thr Gly Asn Met Phe Asp Ile Ser Asp
3870        1315                1320                1325
3872 Val Asn Asn Leu Ser Asp Cys Gln Ala Leu Gly Lys Gln Ala Arg Trp
3873    1330                1335                1340
3875 Lys Asn Val Lys Val Asn Phe Asp Asn Val Gly Ala Gly Tyr Leu Ala
3876 1345                1350                1355                1360
3878 Leu Leu Gln Val Ala Thr Phe Lys Gly Trp Met Asp Ile Met Tyr Ala
3879                1365                1370                1375
3881 Ala Val Asp Ser Arg Asp Val Lys Leu Gln Pro Val Tyr Glu Glu Asn
3882            1380                1385                1390
3884 Leu Tyr Met Tyr Leu Tyr Phe Val Ile Phe Ile Ile Phe Gly Ser Phe
3885        1395                1400                1405
3887 Phe Thr Leu Asn Leu Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:44

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3888    1410                1415                1420
3890 Gln Lys Lys Lys Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu Gln
3891 1425                1430                1435                1440
3893 Lys Lys Tyr Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys Pro Gln
3894                1445                1450                1455
3896 Lys Pro Ile Pro Arg Pro Ala Asn Lys Phe Gln Gly Met Val Phe Asp
3897            1460                1465                1470
3899 Phe Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met Ile Leu Ile Cys
3900        1475                1480                1485
3902 Leu Asn Met Val Thr Met Met Val Glu Thr Asp Asp Gln Gly Lys Tyr
3903    1490                1495                1500
3905 Met Thr Leu Val Leu Ser Arg Ile Asn Leu Val Phe Ile Val Leu Phe
3906 1505                1510                1515                1520
3908 Thr Gly Glu Phe Val Leu Lys Leu Val Ser Leu Arg His Tyr Tyr Phe
3909                1525                1530                1535
3911 Thr Ile Gly Trp Asn Ile Phe Asp Phe Val Val Val Ile Leu Ser Ile
3912            1540                1545                1550
3914 Val Gly Met Phe Leu Ala Glu Met Ile Glu Lys Tyr Phe Val Ser Pro
3915        1555                1560                1565
3917 Thr Leu Phe Arg Val Ile Arg Leu Ala Arg Ile Gly Arg Ile Leu Arg
3918    1570                1575                1580
3920 Leu Ile Lys Gly Ala Lys Gly Ile Arg Thr Leu Leu Phe Ala Leu Met
3921 1585                1590                1595                1600
3923 Met Ser Leu Pro Ala Leu Phe Asn Ile Gly Leu Leu Leu Phe Leu Val
3924                1605                1610                1615
3926 Met Phe Ile Tyr Ala Ile Phe Gly Met Ser Asn Phe Ala Tyr Val Lys
3927            1620                1625                1630
3929 Lys Glu Ala Gly Ile Asp Asp Met Phe Asn Phe Glu Thr Phe Gly Asn
3930        1635                1640                1645
3932 Ser Met Ile Cys Leu Phe Gln Ile Thr Thr Ser Ala Gly Trp Asp Gly
3933    1650                1655                1660
3935 Leu Leu Ala Pro Ile Leu Asn Ser Ala Pro Pro Asp Cys Asp Pro Asp
3936 1665                1670                1675                1680
3938 Thr Ile His Pro Gly Ser Ser Val Lys Gly Asp Cys Gly Asn Pro Ser
3939                1685                1690                1695
3941 Val Gly Ile Phe Phe Phe Val Ser Tyr Ile Ile Ile Ser Phe Leu Val
3942            1700                1705                1710
3944 Val Val Asn Ser Tyr Ile Ala Val Ile Leu Glu Asn Phe Ser Val Ala
3945        1715                1720                1725
3947 Thr Glu Glu Ser Ala Glu Pro Leu Ser Glu Asp Asp Phe Glu Met Phe
3948    1730                1735                1740
3950 Tyr Glu Val Trp Glu Lys Phe Asp Pro Asp Ala Thr Gln Phe Ile Glu
3951 1745                1750                1755                1760
3953 Phe Ser Lys Leu Ser Asp Phe Ala Ala Ala Leu Asp Pro Pro Leu Leu
3954                1765                1770                1775
3956 Ile Ala Lys Pro Asn Lys Val Gln Leu Ile Ala Met Asp Leu Pro Met
3957            1780                1785                1790
3959 Val Ser Gly Asp Arg Ile His Cys Leu Asp Ile Leu Phe Ala Phe Thr
3960        1795                1800                1805
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:44

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

```
3962 Lys Arg Val Leu Gly Glu Ser Gly Glu Met Asp Ala Leu Arg Ile Gln
3963    1810                1815                1820
3965 Met Glu Asp Arg Phe Met Ala Ser Asn Pro Ser Lys Val Ser Tyr Glu
3966 1825                1830                1835                1840
3968 Pro Ile Thr Thr Thr Leu Lys Arg Lys Gln Glu Glu Val Ser Ala Ala
3969                1845                1850                1855
3971 Ile Ile Gln Arg Asn Phe Arg Cys Tyr Leu Leu Lys Gln Arg Leu Lys
3972            1860                1865                1870
3974 Asn Ile Ser Ser Asn Tyr Asn Lys Glu Ala Ile Lys Gly Arg Ile Asp
3975        1875                1880                1885
3977 Leu Pro Ile Lys Gln Asp Met Ile Ile Asp Lys Leu Asn Gly Asn Ser
3978    1890                1895                1900
3980 Thr Pro Glu Lys Thr Asp Gly Ser Ser Ser Thr Thr Ser Pro Pro Ser
3981 1905                1910                1915                1920
3983 Tyr Asp Ser Val Thr Lys Pro Asp Lys Glu Lys Phe Glu Lys Asp Lys
3984                1925                1930                1935
3986 Pro Glu Lys Glu Ser Lys Gly Lys Glu Val Arg Glu Asn Gln Lys
3987            1940                1945                1950
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Item 9

SEQUENCE LISTING

<110> McGill University
Rouleau, Guy A.
Lafreniere, Ronald G.
Cossette, Patrick
Ragsdale, David

delete accent mark

<120> LOCI FOR IDIOPATHIC GENERALIZED EPILEPSY, MUTATIONS THEREOF AND METHOD USING SAME TO ASSESS, DIAGNOSE, PROGNOSE OR TREAT EPILEPSY

<130> GOUD:023

<150> 09/167,623
<151> 2000-11-24

please replace <1407 and <1417 with <1507 and <1517
<1407 is for current application number
<1417 is for current filing date

<140> PCT/CA00/01404 → <1517
<141> 2000-11-24

<140> 60/167,623 → <1507 → <1517
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<170> PatentIn Ver. 2.1

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VARIABLE LOCATION SUMMARY
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:45

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

Use of n's or Xaa's(NEW RULES):
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

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Seq#:4; Pos. 175,177,180,199,215,216,233,249,257,299,325,343,358,367,380
Seq#:4; Pos. 382,394,404,425,454,466,479,490,501,502,507,523,532,548,552
Seq#:4; Pos. 558,586,616,619,626,633,635,636,661,662,670,682,702,703,714
Seq#:4; Pos. 715,725,752,760,768,805,819,843,849,858,865,875,876,883,889
Seq#:4; Pos. 893,895,917,930,934,935,948,960,974,991,1007,1042,1051,1062
Seq#:4; Pos. 1065,1078,1084,1087,1097,1108,1113,1138,1139,1170,1201,1203
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Seq#:23; Pos. 393,415,454,513
Seq#:29; Pos. 43
Seq#:41; Pos. 293
Seq#:42; Pos. 133
Seq#:44; Pos. 229
Seq#:48; Pos. 164
Seq#:55; Pos. 90,378,379,380,381,382,383,384,385,386
Seq#:67; Pos. 122
Seq#:68; Pos. 122
Seq#:84; Pos. 477

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/718,355

DATE: 12/17/2001
TIME: 16:02:45

Input Set : A:\ES.txt
Output Set: C:\CRF31113\REFHOLD\I718355.raw

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:280 W: Numeric Identifier already exists, <140> found multiple times
L:18 M:281 W: Numeric Fields not Ordered, <140> not ordered!.
L:18 M:270 C: Current Application Number differs, Replaced Current Application Number
L:19 M:281 W: Numeric Fields not Ordered, <141> not ordered!.
L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:21 M:280 W: Numeric Identifier already exists, <140> found multiple times
L:21 M:281 W: Numeric Fields not Ordered, <140> not ordered!.
L:21 M:270 C: Current Application Number differs, Replaced Current Application Number
L:22 M:280 W: Numeric Identifier already exists, <141> found multiple times
L:22 M:281 W: Numeric Fields not Ordered, <141> not ordered!.
L:22 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:715 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:4
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L:3271 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:67
L:3644 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:68
L:4289 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:84